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ENVIRONMENTAL ASSESSMENT
HALFWAY CREEK CHANNEL RE-ROUTE
EA NUMBER: OR 125-04-10

BLM Coos Bay District Office Lease/Serial/Case file No.: N/A

Proposed Action Title/Type: Halfway Creek Channel Re-Route

Location of Proposed Action: Sec. 1, T. 21 S., R 08 W., Willamette Meridian

Applicant (if any): N/A

Conformance With Applicable Land Use Plan: The proposed action is subject to the *Coos Bay District Resource Management Plan & Environmental Impact Statement* and its Record of Decision (BLM, 1995) as supplemented and amended; which is in conformance with the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl* and its Record of Decision (Interagency, 1994) as supplemented and amended. The proposed action is also consistent with the Riparian Reserve Standards and Guidelines of the Northwest Forest Plan, and the Aquatic Conservation Strategy, and will contribute to restoring the fifth-field watersheds of the project area over the long term. This plan has been reviewed to determine if the proposed action conforms with the land use plan's terms and conditions as required by 43 CFR 1601.5.

Remarks: The Proposed Action is in compliance with the *Coos Bay District Resource Management Plan & Environmental Impact Statement* and its Record of Decision (BLM, 1995) as supplemented and amended; hereby incorporated by reference. The RMP has been determined to be consistent with the standards and guidelines for healthy lands at the land use plan scale and associated timelines.

Need for Proposed Action: Halfway Creek was diverted into a constructed channel several decades ago (around 1960) near its confluence with the Smith River. The diversion was likely constructed due to the expense of bridging the natural channel and because of problems with plugging of the double culverts at the road crossing. However, in constructing the new straightened and simplified channel, a series of cascades and areas of high velocity resulted that prevent juvenile passage from the mainstem Smith River, and adult salmonid passage is limited to a narrow range of flows. The historical channel is low-gradient (approximately 1%) and would be passable by adult and juvenile salmonids during most flow stages.

Description of Proposed Action: The proposed action is to re-route lower Halfway Creek back to its original channel and block the entrance to the constructed channel. Replacement of the double culverts under Halfway Creek road with a bridge is covered under a separate NEPA document (DNA #6 to OR120-02-12; Coos Bay District Culvert and Stream Crossing Environmental Assessment).

The blocking of the constructed channel would be accomplished by utilizing the boulders and fill used to block the original channel of lower Halfway Creek. The material would be moved from its present location to the adjacent entrance to the constructed channel, and within the channel itself. Additional boulders, fill material, and fabric would also be used as needed to reinforce and seal the relocated material.

Approximately 800 to 950 cubic yards of sand, rock and organic material between the Halfway Creek channel and the road crossing would be removed to facilitate restoring flow to the original channel. An additional approximately 75 cubic yards of material would be removed from below the road crossing for a distance of about 225 feet to serve as a pilot channel to direct the stream flow and reduce erosion during subsequent high flow events. After the channel has stabilized (within approximately 1 to 3 years after restoring stream-flow), boulder and/or log structures may be placed in lower Halfway Creek to further enhance instream habitat conditions.

Waste materials of suitable quality removed from the abandoned channel and the road crossing would be used to fill the constructed channel below the point where it is blocked. All fill placed in the channel will be stabilized to prevent erosion, and "ramped" in a manner that will allow terrestrial wildlife to exit or cross the channel. The fill will be placed above the elevation at which the Smith River is likely to backwater the channel during high flows. A temporary access route would be utilized between the road and the constructed channel for equipment to move the waste material to the channel. Material removed from the original channel that is not suitable for transferring to the constructed channel for fill would be transported to a stable waste area approximately ¼ mile from the project site, as shown on the project map.

A temporary berm would also be utilized in Halfway Creek during in-channel work in order to pump the stream-flow around the work area and minimize impacts to water quality. Prior to blocking the constructed channel, any fish or other aquatic vertebrates remaining in the channel between the Smith River and the project site would be netted and transferred to the Smith River to prevent mortality from stranding.

Environmental Impacts to Critical Elements of the Human Environment:

Critical Elements	Affected Yes	Affected No	Critical Elements	Affected Yes	Affected No
Air Quality	__	X	T & E Species	X	__
ACECs	__	X	Wastes, Hazardous/Solid	__	X
Cultural Resources	__	X	Water Quality	X	__
Farmlands, Prime/Unique	__	X	Wetlands/Riparian Zones/ACS	__	X
Floodplains	__	X	Wild & Scenic Rivers	__	X
Unresolved conflicts	__	X	Wilderness	__	X
Noxious Weed Management	__	X	Port Orford Cedar Management	__	X
Environmental Justice Concerns	__	X	Energy production, transmission	__	X
Native American religious concerns and/or Indian trust resources	__	X			

Description of Impacts to Specific Elements of the Human Environment: The primary impact that would occur as a result of the channel re-route is erosion of the streambed as the flow is restored through the abandoned channel. However, the constructed channel has steep, almost vertical banks that have been eroding since water was diverted into it in the early 1960's. As such, the constructed channel has created a chronic sediment source, while restoring flow to the historical channel will result in sediment pulses in the short-term (primarily limited to the first winter), with minimal bank erosion in the long-term due to the presence of a floodplain and wider, low-gradient channel profile. In addition, excavation that would occur in the channel to remove organic and inorganic debris that has accumulated since the flow of Halfway Creek was diverted would further reduce the potential for sediment delivery to Smith River. In the long-term, there will likely be less fine sediment delivery to Smith River than there is currently because of the un-vegetated steep banks in the constructed channel.

Once flow is resumed into lower Halfway Creek, gravel and cobble substrate stored upstream of the project area will eventually replace the finer material that is initially flushed, and the presence of a floodplain and wider channel profile will minimize bank erosion in the long-term. Boulders and/or log structures that may be placed in the reactivated channel after it has stabilized will serve to capture substrate, enhance channel sinuosity and provide holding and rearing cover for salmonid and other resident fish species.

Some minor disturbance may occur to fish, primarily salmonids, in the abandoned channel that are relocated to the Smith River, but handling will be kept to the minimum necessary, and no mortality of fish or other aquatic life is anticipated. The project is covered under the October 18, 2002 Programmatic Biological Opinion (2002/00879) from NOAA fisheries authorizing certain "Likely to Adversely Affect" activities affecting Oregon Coast (OC) Coho Salmon, and OC Steelhead. Consultation for Essential Fish Habitat as required by the Magnuson-Stevens Fishery Conservation and Management Act was also completed with the issuance of the BO.

Minimal impacts to wildlife species are expected in the short-term, and aquatic wildlife species will derive benefits from a restored channel with cover habitat and improved water quality (the constructed channel substrate is entirely bedrock). Any effects to listed wildlife species would be disturbance effects only. No suitable habitat would be removed as a result of this project. This project would be considered a "Low Disturbance Project" (BO No. 1-15-03-I-006) because the project is of short duration, and is not in an area with high potential of occupancy of listed species. Although seasonal restrictions are not required, potential disturbance effects to wildlife species would be reduced by delaying the start of disturbance-producing activities until after August 5, if possible.

Existing snags in the area will be protected to the extent possible, while providing a safe work area for the project. Any identified hazard trees which have to be removed would be felled and left in place as coarse woody debris.

No Special Status lichens or bryophytes occur in the project area. Surveys for Special Status vascular plants will be conducted in the spring of 2004. It is unlikely that either tall bugbane (*Cimicifuga elata*), or clustered lady's slipper (*Cypridpedium fasiculatum*) will be found in the project area, but if found they would require protection and may impact the project. Guidelines for management for any Special Status botanical species would be implemented either under the Final Supplemental Environmental Impact Statement (FEIS) or under the Record of Decision (ROD) 2001. Restoration with native plants in disturbed areas would enhance botanical diversity and abundance and limit colonization by non-native species. See the botany report in the EA file for additional information.

Description of Mitigation Measures and Residual Impacts: All disturbed soils in the project area, including the waste materials, will be seeded and mulched to minimize subsequent erosion. All work associated with the project will be limited to the instream work period (July 1 to September 15) to minimize impacts to water quality and aquatic-dependant species.

Activity resulting from the proposed action would be subject to State of Oregon Administrative Rule No. 340-108, Oil and Hazardous Materials Spills and Releases, which specifies the reporting requirements, cleanup standards and liability that attaches to a spill or release or threatened spill or release involving oil or hazardous substances. In addition, the Coos Bay District Hazardous Materials Contingency Plan and Spill Plan for Riparian Operations apply when applicable to operations where a release threatens to reach surface waters or is at or in excess of reportable quantities.

Persons/Agencies Consulted: Oregon Department of Fish and Wildlife (Roseburg District) and the Umpqua Basin Watershed Council support the project. Instream restoration occurred in Halfway Creek in 2002, and additional instream restoration work is planned for 2005.

Preparers:	Dan Van Slyke	UFO Restoration Coordinator
	Pat Olmstead	Fishery Biologist
	John Chatt	Wildlife Biologist
	Jennifer Sperling	Botanist
	John Colby	Hydrologist
	Tim Barnes	Soil Scientist/Geologist/Energy Development
	Stephan Samuels	Cultural Resources
	Tim Votaw	Hazardous Materials
	Brian Thauland	Engineering
	Scott Knowles	Noxious Weeds/Environmental Justice/Port Orford Cedar

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FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD.

I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined that the proposed action with the mitigation measures described above will not have any significant impacts on the human environment and that an EIS is not required. I have also determined that the project is in conformance with the approved land use plan. It is my decision to implement the project as described in the Description of the Proposed Action section.

Mitigation Measures: No mitigation measures beyond those described above are appropriate to the proposed action.

Decision recommended by:

NRSA: _s/s Pat Olmstead_____ Date: ___5/11/2004_____
Kathy Wall

NRSA: s/s Jon Menten_____ Date:____5/11/2004_____
Ralph Thomas

Approved by:

FM: __s/s Ralph Thomas_____ Date: _____5/11/2004_____
M. Elaine Raper